

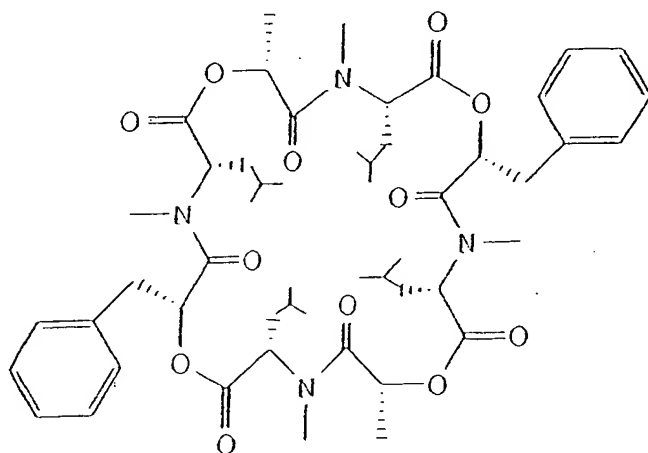
AMENDMENTS TO THE CLAIMS

1. (Currently amended) A transformant of a microorganism producing a peptide or a depsipeptide, wherein the transformant is produced by transforming the microorganism by introducing (i) a polynucleotide encoding the amino acid sequence of SEQ ID NO: 2 ~~or a modified sequence of SEQ ID NO: 2 having 4-amino-4-deoxychorismic acid synthase activity,~~ (ii) a polynucleotide encoding the amino acid sequence of SEQ ID NO: 4 ~~or a modified sequence of SEQ ID NO: 4 having 4-amino-4-deoxychorismic acid mutase activity,~~ and (iii) a polynucleotide encoding the amino acid sequence of SEQ ID NO: 6 ~~or a modified sequence of SEQ ID NO: 6 having 4-amino-4-deoxyphenic acid dehydrogenase activity,~~ so that the transformant produces a peptide or a depsipeptide having a benzene ring skeleton substituted at the para-position with a nitro group or amino group, ~~and wherein the modified sequences have one to several modifications selected from the group consisting of a substitution, a deletion, an insertion, and an addition.~~

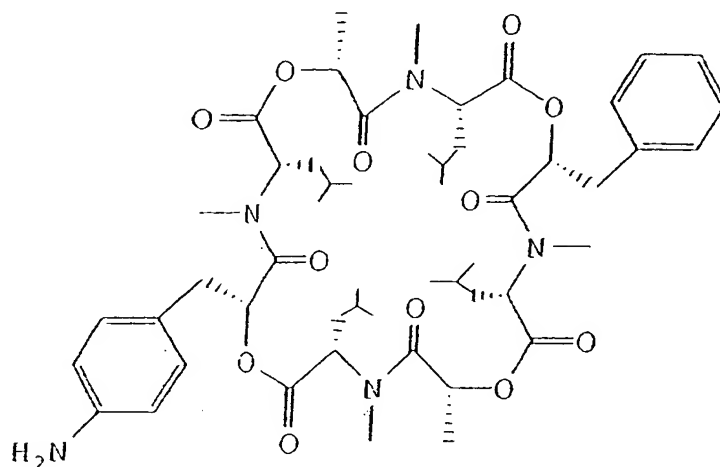
2-4. (Cancelled)

5. (Currently amended) The transformant according to claim 1, wherein the peptide or the depsipeptide is synthesized from at least one ~~amino acid~~ molecule selected from the group consisting of phenylalanine, tyrosine, and phenyllactic acid.

6. (Previously presented) The transformant according to claim 1, wherein the microorganism to be transformed produces a substance PF1022 ([cyclo (D-lactyl-L-N-methylleucyl-D-3-phenyllactyl-L-N-methylleucyl-D-lactyl-L-N-methylleucyl-D-3-phenyllactyl-L-N-methylleucyl)]), represented by the following formula:



7. (Previously presented) The transformant according to claim 1, wherein the transformant produces a substance PF1022 derivative represented by the following formula:



8-16. (Cancelled)

17. (Previously presented) The transformant according to claim 1, wherein the microorganism is transformed by introducing polynucleotides comprising: (i) the DNA sequence of SEQ ID NO: 1, (ii) the DNA sequence of SEQ ID NO: 3, and (iii) the DNA sequence of SEQ ID NO: 5 into the microorganism.

18. (Cancelled)

19. (Previously presented) The transformant according to claim 1, wherein the microorganism to be transformed is Mycelia sterilia.

20. (Previously presented) The transformant according to claim 19, wherein Mycelia
sterilia is strain PF1022 deposited with the National Institute of Bioscience and
Human-Technology under an accession number of FERM BP-2671.

21. (Previously presented) The transformant according to claim 1, wherein the
transformant is strain 55-65 deposited with the National Institute of Bioscience and
Human-Technology under an accession number of FERM BP-7255.

22. (Cancelled)

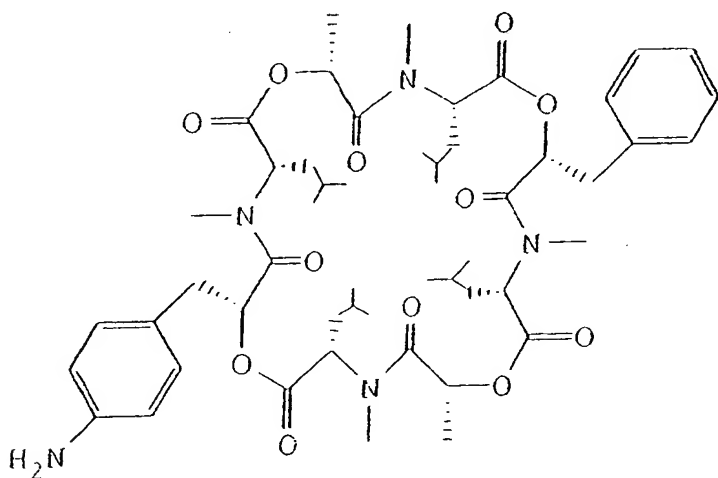
23. (Withdrawn-Currently amended) A method for producing a peptide or a
depsipeptide having a benzene ring skeleton substituted at the para-position with a a nitro group
or amino group, which comprises the steps of
culturing the transformant of claim 1 under conditions suitable for production of the
peptide or the depsipeptide, and
collecting the the peptide or the depsipeptide.

24. (Cancelled)

25. (Withdrawn) A method for producing a substance PF1022 derivative, which comprises the steps of

culturing the transformant of claim 6 under conditions suitable for production of the substance PF1022 derivative, and

collecting the substance PF1022 derivative of the following formula:



26. (Currently amended) An isolated polynucleotide encoding the amino acid sequence of SEQ ID NO: 2 ~~or a modified sequence of SEQ ID NO: 2 having 4-amino-4-deoxychorismic acid synthase activity.~~

27. (Original) The polynucleotide according to claim 26, which comprises the DNA sequence of SEQ ID NO: 1.

28. (Currently amended) An isolated polynucleotide encoding the amino acid sequence of SEQ ID NO: 4 ~~or a modified sequence of SEQ ID NO: 4 having 4-amino-4-deoxychorismic acid mutase activity.~~

29. (Previously presented) The polynucleotide according to claim 28, which comprises the DNA sequence of SEQ ID NO: 3.

30. (Currently amended) An isolated polynucleotide encoding the amino acid sequence of SEQ ID NO: 6 ~~or a modified sequence of SEQ ID NO: 6 having 4-amino-4-deoxyprephenic acid dehydrogenase activity.~~

31. (Previously presented) The polynucleotide according to claim 30, which comprises the DNA sequence of SEQ ID NO: 5.

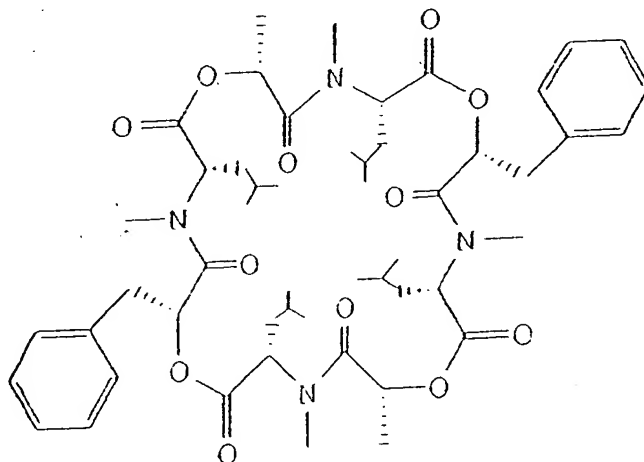
32. (Previously presented) The transformant according to claim 6, wherein substance PF1022 is synthesized by a substance PF1022-synthesizing enzyme from four molecules of L-leucine, two molecules of D-lactic acid and two molecules of D-phenyllactic acid.

33. (Currently amended) A transformant of Mycelia sterilia, wherein the transformant is produced by transforming the Mycelia sterilia by introducing (i) a polynucleotide encoding the amino acid sequence of SEQ ID NO: 2 ~~or a modified sequence of SEQ ID NO: 2 having 4-amino-4-deoxychorismic acid synthase activity,~~ (ii) a polynucleotide encoding the amino acid sequence of SEQ ID NO: 4 ~~or a modified sequence of SEQ ID NO: 4 having 4-amino-4-deoxychorismic acid mutase activity,~~ and (iii) a polynucleotide encoding the amino acid sequence of SEQ ID NO: 6 ~~or a modified sequence of SEQ ID NO: 6 having 4-amino-4-deoxyprephenic acid dehydrogenase activity,~~ and wherein the modified sequences

~~have one to several modifications selected from the group consisting of a substitution, a deletion, an insertion, and an addition.~~

34. (Previously presented) The transformant according to claim 33, wherein Mycelia sterilia is transformed by introducing polynucleotides comprising (i) the DNA sequence of SEQ ID NO: 1, (ii) the DNA sequence of SEQ ID NO: 3, and (iii) the DNA sequence of SEQ ID NO: 5 into the Mycelia sterilia.

35. (Previously presented) The transformant according to claim 33, wherein the Mycelia sterilia to be transformed produces a substance PF1022 ([cyclo (D-lactyl-L-N-methylleucyl-D-3-phenyllactyl-L-N-methylleucyl-D-lactyl-L-N-methylleucyl-D-3-phenyllactyl-L-N-methylleucyl)]), represented by the following formula:



37. (Previously presented) The transformant according to claim 33, wherein the transformant produces a substance PF1022 derivative represented by the following formula:

